

ANSWERS: Types of solids

QUESTION: Name the... i) type of solid

ii) type of particle present in the solid

iii) the bonding (attractive forces between particles)

	Type of solid	Type of particle present in the solid	The bonding (attractive forces between particles)
C graphite	covalent network, 3D	atoms	strong covalent bond between atoms weak intermolecular force between layers
NH ₃	molecular	molecules	intermolecular
Zn	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
Mg	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
O ₂	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
MgO	ionic, 3D	oppositely charged ions	ionic bond
SiO ₂	covalent network, 3D	atoms	strong covalent bond between atoms
Br ₂	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
Na	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
P ₄	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
SO ₃	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
MgCl ₂	ionic, 3D	oppositely charged ions	ionic bond
Cl ₂	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
CuCl ₂	ionic, 3D	oppositely charged ions	ionic bond
K	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
CO ₂	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
S ₈	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
diamond	covalent network, 3D	atoms	strong covalent bond between atoms
Ag	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
sodium oxide	ionic, 3D	oppositely charged ions	ionic bond
aluminium oxide	ionic, 3D	oppositely charged ions	ionic bond
CaCl ₂	ionic, 3D	oppositely charged ions	ionic bond
H ₂ O	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
NaCl	ionic, 3D	oppositely charged ions	ionic bond
SiCl ₃	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules

SCl_2	molecular	molecules	strong covalent bond between atoms weak intermolecular force between molecules
Cu	metallic, 3D	cations in a sea of delocalised electrons	metallic bond

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